

-9-

I CLAIM:

1. A flat-plate monopole antenna comprising:
a conductive ground plane;
a conductive radiating plate spaced apart from the ground plane and, together with the ground plane, defining a cavity therebetween;
an antennae interface terminal in communication with the cavity and being electrically isolated from the ground plane and the radiating plate; and
a resonant network for defining operating characteristics of the antennae, the resonant network including an inductive element electrically coupled to the interface terminal and the radiating plate.
2. The monopole antenna according to claim 1, wherein the ground plane, the radiating plate and the cavity define a capacitive element, and the inductive element is disposed in parallel with the capacitive element.
3. The monopole antenna according to claim 1, wherein the inductors are disposed within the cavity.
4. The monopole antenna according to claim 1, wherein at least one of the inductors comprises an air-core inductor.
5. The wireless communications device according to claim 1, wherein the inductors comprise coiled wire inductors, each said coiled wire inductor including a number of wire turns, and the resonant network provides the antenna with a resonant frequency determined in accordance with the number of wire turns of the coiled wire inductors.

FOIAT 96286650

[illegible]

6. The monopole antenna according to claim 1, wherein the resonant network includes a plurality of distinct inductive elements each being electrically coupled to the interface terminal and a respective location on the radiating plate.
7. The monopole antenna according to claim 1, wherein the radiating plate comprises an arcuate radiating plate.
8. A wireless communications device comprising:
 - a conductive casing for receiving wireless communications hardware therein, the conductive casing including an antenna communication port for interfacing with the communications hardware;
 - a conductive radiating plate spaced apart from the casing and, together with the ground plane, defining an antenna; and
 - a resonant network for defining operating characteristics of the antenna, the resonant network including a first inductor electrically coupled between the radiating plate and the communications port, and a second inductor electrically coupled between the communications port and the casing.
9. The wireless communications device according to claim 8, wherein the casing, the radiating plate and the cavity define a capacitive element, and the inductors are disposed in parallel with the capacitive element.
10. The wireless communications device according to claim 8, wherein the radiating plate and the casing together define a cavity therebetween, and the inductors are disposed within the cavity.
11. The wireless communications device according to claim 8, wherein at least one of the inductors comprises an air-core inductor.

-11-

12. The wireless communications device according to claim 8, wherein the inductors comprise coiled wire inductors, each said coiled wire inductor including a number of wire turns, and the resonant network provides the antenna with a resonant frequency determined in accordance with the number of wire turns of the coiled wire inductors.

13. The wireless communications device according to claim 7, wherein the resonant network includes a plurality of distinct inductive elements each being electrically coupled to the communications port and a respective location on the radiating plate.

14. The wireless communications device according to claim 7, wherein the casing includes at least one face, and the radiating plate is inclined relative to the at least one face.

15. The wireless communications device according to claim 7, wherein the radiating plate comprises an arcuate radiating plate.

TELETYPE "96286650